IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
ON APPEAL FROM THE EXAMINER TO THE BOARD
OF PATENT APPEALS AND INTERFERENCES

In re Application of: Richard Harvey et al.

Serial No.:   10/648,606

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Confirmation No.:   4231

Group Art Unit: 2164

Examiner: Alicia M. Lewis

Title: WEB SERVICES APPARATUS AND METHODS

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

APPEAL BRIEF

Appellants have appealed to the Board of Patent Appeals and Interferences ("Board") from the Final Office Action dated February 23, 2010 ("Final Office Action") and the Advisory Action dated May 14, 2010. Appellants filed a Notice of Appeal and Pre-Appeal Brief Request for Review on June 22, 2010 with the statutory fee of $540.00.

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REAL PARTY IN INTEREST

This Application is currently owned by Computer Associates Think, Inc. as indicated by assignment recorded on June 21, 2004 from inventors Richard H. Harvey and Timothy Bentley to Computer Associates Think, Inc., in the Assignment Records of the PTO at Reel 015485, Frame 0533.

RELATED APPEALS AND INTERFERENCES

The Appellants, the undersigned Attorney for Appellants, and the Assignee know of no applications on appeal that may directly affect, be directly affected by, or have any bearing upon the Board's decision in the pending appeal.

STATUS OF CLAIMS

Claims 1-5 and 8-10 are pending in the Application and stand rejected. Specifically, the Examiner rejects Claims 1-5 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2004/0002955 A1 by Gadbois et al. ("*Gadbois*") in view of U.S. Patent No. 7,200,869 B1 to Hacherl et al. ("*Hacherl*"). The Examiner rejects Claim 8 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2004/0204958 A1 by Perkins et al. ("*Perkins*") in view of U.S. Patent No. 7,296,061 to Martinez ("*Martinez*") and further in view of *Gadbois*. The Examiner rejects Claims 8-10 under 35 U.S.C. § 103(a) as being unpatentable over *Perkins* in view of *Hacherl*, and further in view of U.S. Patent Publication No. 2004/0213409 A1 by Murto et al. ("*Murto*"). For the reasons discussed below, Appellants respectfully submit that these rejections are improper and should be reversed by the Board. Accordingly, Appellants present Claims 1-5 and 8-10 for appeal and set forth these claims in Appendix A.

STATUS OF AMENDMENTS

The claims on appeal appearing in Appendix A of this Appeal Brief represent the form of the claims as of the time of the Final Office Action.

SUMMARY OF CLAIMED SUBJECT MATTER

With regard to the independent claims currently under Appeal, Appellants provide the following concise explanation of the subject matter recited in the claim elements. For brevity, Appellants do not necessarily identify every portion of the Specification and drawings relevant to the recited claim elements. Additionally, this explanation should not be used to limit Appellants' claims but instead is intended to assist the Board in considering the Appeal of this Application.

According to a particular embodiment, a Web Services system includes a registry in which businesses may register. The registry includes a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory. The directory module is configured to generate at least one Domain object. The at least one Domain object includes a directory prefix name, and the at least one Domain object is a root object of the LDAP directory. The directory module is further configured to generate at least one User object in the LDAP directory based on a UDDI account. The at least one User object identifies a user account for managing at least one Business Entity object arranged under the at least one User object, and the at least one User object is arranged under the at least one Domain object in the LDAP directory. The at least one User object comprises security information defining what objects a user has access to in the LDAP directory. The at least one User object grants access to the user based on the security information. The at least one Business Entity object includes at least one business name and at least one business contact. The at least one business contact includes at least one business address. The directory module is further configured to receive a UDDI registry query. The directory module is further configured to generate a UDDI response based on data in the at least one Domain object and the at least one User object in the LDAP directory. The Web Services system further includes a storage system for storing business information and accessible via the LDAP directory.

Claim 1 - Independent

    A Web Services Directory comprising:

    a computer-readable medium; and

a processor, the processor configured to execute a program of instructions encoded on the computer-readable medium, the program of instructions comprising:

a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory, the directory module configured to:

generate at least one Business Entity object in the LDAP directory based on a UDDI Business Entity element;

generate at least one User object in the LDAP directory based on a UDDI account, wherein the at least one Business Entity object is arranged under the at least one User object in the LDAP directory, and wherein the at least one User object comprises security information defining what objects a user has access to in a hierarchical directory, and wherein the at least one User object grants access to the user based on the security information;

receive a UDDI registry query; and

generate a UDDI response based on data in the at least one Business Entity object and the at least one User object in the LDAP directory.

See, e.g., Figures 9, 11, and 12; and in the Specification at 7:21-9:10; 25:3-26:5; and 32:1-35:12.

Claim 8 - Independent

A Web Services system comprising:

a registry in which businesses may register, the registry comprising a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory, the directory module configured to:

generate at least one Domain object, wherein the at least one Domain object comprises a directory prefix name, and the at least one Domain object is a root object of the LDAP directory;

generate at least one User object in the LDAP directory based on a UDDI account, wherein the at least one User object identifies a user account for managing at least one Business Entity object arranged under the at least one User object, and the at least one

User object is arranged under the at least one Domain object in the LDAP directory, and wherein the at least one User object comprises security information defining what objects a user has access to in the LDAP directory, and wherein the at least one User object grants access to the user based on the security information; the at least one Business Entity object comprising at least one business name and at least one business contact, the at least one business contact comprising at least one business address;

receive a UDDI registry query; and

generate a UDDI response based on data in the at least one Domain object and the at least one User object in the LDAP directory; and

a storage system for storing business information and accessible via the LDAP directory.

See, e.g., Figures 9, 11, and 12; and in the Specification at 7:21-9:10; 25:3-26:5; and 32:1-35:12.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Claim 1 under 35 U.S.C. § 103(a) as being unpatentable over *Gadbois* in view of *Hacherl.*

2. Claim 8 under 35 U.S.C. § 103(a) as being unpatentable over *Perkins* in view of *Martinez* and further in view of *Gadbois.*

3. Claim 8 under 35 U.S.C. § 103(a) as being unpatentable over *Perkins* in view of *Hacherl* and further in view of *Murto.*

4. Claim 9 under 35 U.S.C. § 103(a) as being unpatentable over *Perkins* in view of *Hacherl* and further in view of *Murto.*

5. Claim 10 under 35 U.S.C. § 103(a) as being unpatentable over *Perkins* in view of *Hacherl* and further in view of *Murto.*

6. Claims 2-5 under 35 U.S.C. § 103(a) as being unpatentable over *Gadbois* in view of *Hacherl.*

ARGUMENTS

I. The alleged *Gadbois-Hacherl* combination fails to teach or suggest all limitations of Claim 1

The Examiner rejects Claim 1 under 35 U.S.C. § 103(a) as being unpatentable over *Gadbois* in view of *Hacherl*. Appellants respectfully submit that the cited references fail to disclose, teach, or suggest all limitations of the claims.

For example, the cited references fail to teach or suggest an "a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory," as recited by Claim 1. The Examiner contends that *Gadbois* discloses this limitation. *See Final Office Action*, Pages 3 and 13. *Gadbois* discloses separate registry servers 110 and 120 that may connect to directory servers 150 and 160. *See Gadbois*, Figure 1, paragraph 22. For example, *Gadbois* discloses that a user accesses registry server 130 by sending a message to registry server 130 and "depending on the content of the message, registry server 130 accesses directory server 150." In other words, *Gadbois* discloses that the registry servers are separate from directory servers and that the registry servers may merely access the directory servers for certain information. Appellants respectfully submit that a separate registry server that may connect to a directory to access information in no way teaches or suggests implementing a UDDI registry in an LDAP directory. In other words, there is no teaching or suggestion in *Gadbois* that the directory servers implement anything resembling a UDDI registry. Thus, the cited references do not teach or suggest "a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory."

Thus, the cited references fail to teach or suggest, expressly or inherently, every element of Claim 1. Claim 1 is thus allowable for at least these reasons. Accordingly, Appellants respectfully request reconsideration and allowance of Claim 1.

II. The alleged *Perkins-Martinez-Gadbois* combination fails to teach or suggest all limitations of Claim 8

The Examiner rejects Claim 8 under 35 U.S.C. § 103(a) as being unpatentable over *Perkins* in view of *Martinez* and further in view of *Gadbois*. Appellants respectfully submit that the cited references fail to disclose, teach, or suggest all limitations of the claim.

For example, the cited references fail to teach or suggest an "a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory," as recited by Claim 8. The Examiner concedes that *Perkins* and *Martinez* do not disclose this limitation. *See Final Office Action*, Page 8. Instead, The Examiner contends that *Gadbois* discloses this limitation. *See Final Office Action*, Page 8. However, as described above with respect to Claim 1, *Gadbois* discloses separate registry servers 110 and 120 that may connect to directory servers 150 and 160 but there is no teaching or suggestion in *Gadbois* that the directory servers implement anything resembling a UDDI registry. Thus, the cited references do not teach or suggest "a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory."

Thus, the cited references fail to teach or suggest, expressly or inherently, every element of Claim 8. Claim 8 is thus allowable for at least these reasons. Accordingly, Appellants respectfully request reconsideration and allowance of Claim 8.

III. The alleged *Perkins-Hacherl-Murto* combination fails to teach or suggest all limitations of Claim 8

The Examiner also rejects Claim 8 under 35 U.S.C. § 103(a) as being unpatentable over *Perkins* in view of *Hacherl* and further in view of *Murto*. Appellants respectfully submit that the cited references fail to disclose, teach, or suggest all limitations of the claim.

For example, the cited references fail to teach or suggest an "a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory," as recited by Claim 8. The

Examiner concedes that *Perkins* and *Hacherl* do not disclose this limitation. *See Final Office Action*, Page 11. Instead, the Examiner contends that *Murto* discloses this limitation, but this is incorrect. *Murto* discloses mobile phones that access a UDDI registry. *See Murto*, Figure 1, paragraph 12. Appellants respectfully submit that merely disclosing a registry that may be accessed by mobile phones in no way teaches or suggests implementing a UDDI registry in an LDAP directory. Thus, the cited references do not teach or suggest "a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory."

As another example, the cited references fail to teach or suggest "a registry in which businesses may register . . . comprising . . . at least one User object, wherein . . . the at least one User object comprises security information defining what objects a user has access to in the hierarchical directory." The Examiner concedes that *Perkins* does not teach or suggest this limitation. *See Final Office Action*, Page 10. Instead, the Examiner contends that *Hacherl* discloses this limitation. Appellants respectfully disagree. *Hacherl* discloses a user account in an operating system. *See Hacherl*, Column 6, lines 30-36. Appellants respectfully submit that a user account in an operating system in no way teaches or suggests a User object in a registry in which businesses may register. Thus, *Hacherl* does not teach or suggest "a registry in which businesses may register . . . comprising . . . at least one User object, wherein . . . the at least one User object comprises security information defining what objects a user has access to in the hierarchical directory." For at least these reasons, Appellants respectfully submit that Claim 8 is patentably distinguishable from the cited references.

Thus, the cited references fail to teach or suggest, expressly or inherently, every element of Claim 8. Claim 8 is thus allowable for at least these reasons. Accordingly, Appellants respectfully request reconsideration and allowance of Claim 8.

IV. The alleged *Perkins-Hacherl-Murto* combination fails to teach or suggest all limitations of Claim 9

The Examiner rejects Claim 9 under 35 U.S.C. § 103(a) as being unpatentable over *Perkins* in view of *Hacherl* and further in view of *Murto*. Appellants respectfully submit that the cited references fail to disclose, teach, or suggest all limitations of the claim.

For example, the cited references fail to teach or suggest "at least one Binding Template object, wherein the at least one Binding Template object comprises data identifying a plurality of service specifications." The Examiner concedes that *Perkins* and *Hacherl* do not disclose this limitation. *See Final Office Action*, Page 11. The Examiner contends that Paragraphs 54-55, 59, and 62 of *Murto* disclose this limitation. *See Final Office Action*, Page 12. Appellants respectfully disagree. Again, Appellants note that the cited portions merely refer to a registry search menu presented to a user of a mobile phone in a browser. *See Murto*, Paragraph 49. *Murto* discloses that one menu option that may be selected is "BINDING TEMPLATE DATA." *See Murto*, Paragraph 55. However, at no point does *Murto* teach or suggest that the binding template data comprises data identifying a plurality of service specifications. Thus, the cited references do not teach or suggest "at least one Binding Template object, wherein the at least one Binding Template object comprises data identifying a plurality of service specifications."

Thus, the cited references fail to teach or suggest, expressly or inherently, every element of Claim 9. Claim 9 is thus allowable for at least these reasons. Accordingly, Appellants respectfully request reconsideration and allowance of Claim 9.

V. The alleged *Perkins-Hacherl-Murto* combination fails to teach or suggest all limitations of Claim 10

The Examiner rejects Claim 10 under 35 U.S.C. § 103(a) as being unpatentable over *Perkins* in view of *Hacherl* and further in view of *Murto*. Appellants respectfully submit that the cited references fail to disclose, teach, or suggest all limitations of the claim.

For example, the cited references fail to teach or suggest "at least one TModel object, wherein the at least one TModel object comprises a keyed reference to the at least one Binding Template object, and the at least one TModel object is arranged under the at least one User object." The Examiner concedes that *Perkins* and *Hacherl* do not disclose this limitation. *See Final Office Action*, Page 12. The Examiner contends that Paragraphs 53-56, 59, and 61-63 of *Murto* disclose this limitation. *See Final Office Action*, Page 12. In particular, the Examiner argues that "Murto teaches that a tmodel object has a reference to the binding template object" and "further that a tmodel object is arranged under a business entity." *See Final Office Action*, Page 12. Appellants respectfully disagree. Appellants note that the portions cited by the Examiner refer to a registry search menu presented to a user of a mobile phone in a browser. *See Murto*, Paragraph 49. *Murto* discloses that one menu option that may be selected is "T_MODEL DATA." *See Murto*, Paragraph 56. However, at no point does *Murto* teach or suggest that the tModel object selectable by the user includes a keyed reference to a Binding Template object, and *Murto* certainly does not teach or suggest that the tModel object is arranged under at least one User object. Instead, Paragraph 63 of *Murto* merely explains that a bindingTemplate XML element may include a pointer to the tModel data, stating:

> [0063] A fourth type of data in the UDDI registry is the tModel XML element, which is pointed to by a pointer in the bindingTemplate XML element. The tModel XML element specifies the protocols, interchange formats and interchange sequencing rules for accessing web pages from the business' server having the service information specified in the businessService XML element.

Thus, the cited references do not teach or suggest "at least one TModel object, wherein the at least one TModel object comprises a keyed reference to the at least one Binding Template object, and the at least one TModel object is arranged under the at least one User object."

Thus, the cited references fail to teach or suggest, expressly or inherently, every element of Claim 10. Claim 10 is thus allowable for at least these reasons. Accordingly, Appellants respectfully request reconsideration and allowance of Claim 10.

VI. The alleged *Gadbois-Hacherl* combination fails to teach or suggest all limitations of Claims 2-5

The Examiner rejects Claims 2-5 under 35 U.S.C. § 103(a) as being unpatentable over *Gadbois* in view of *Hacherl*. Although Appellants believe that these claims include limitations not disclosed in the cited references, Appellants submit that these claims are allowable at least because these claims depend from one of the allowable independent claims discussed above. For at least these reasons, Appellants respectfully contend that Claims 2-5 are patentably distinguishable from the cited references.

CONCLUSION

Appellants have demonstrated that the present invention, as claimed, is clearly distinguishable over the prior art cited by the Examiner. Therefore, Appellants respectfully request the Board to reverse the final rejections and instruct the Examiner to issue a Notice of Allowance with respect to all pending claims.

The Commissioner is hereby authorized to charge **$540.00** for filing this Brief in support of an Appeal to **Deposit Account No. 02-0384 of Baker Botts, L.L.P.** No other fees are believed due; however, the Commissioner is authorized to charge any additional fees or credits to **Deposit Account No. 02-0384 of Baker Botts L.L.P.**

Respectfully submitted,

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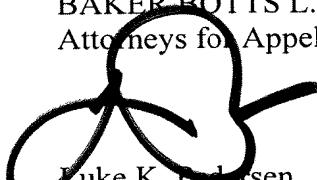
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Appendix A: Claims Involved in Appeal

1.   **(Previously Presented)** A Web Services Directory comprising:

a computer-readable medium; and

a processor, the processor configured to execute a program of instructions encoded on the computer-readable medium, the program of instructions comprising:

a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory, the directory module configured to:

generate at least one Business Entity object in the LDAP directory based on a UDDI Business Entity element;

generate at least one User object in the LDAP directory based on a UDDI account, wherein the at least one Business Entity object is arranged under the at least one User object in the LDAP directory, and wherein the at least one User object comprises security information defining what objects a user has access to in a hierarchical directory, and wherein the at least one User object grants access to the user based on the security information;

receive a UDDI registry query; and

generate a UDDI response based on data in the at least one Business Entity object and the at least one User object in the LDAP directory.

2.   **(Previously Presented)** The Web Services directory as recited in claim 1, the directory module further configured to:

generate at least one Business Service object; and

generate at least one Binding Template object, wherein the at least one Business Service object is arranged under the at least one Business Entity object, and the at least one Binding Template object is arranged under the at least one Business Service object.

3.   (**Original**) The Web Services directory as recited in claim 1, wherein the at least one Business Entity object is arranged under the at least one User object by virtue of at least one corresponding User Child object.

4.   (**Previously Presented**) The Web Services directory as recited in claim 1, the directory module further configured to generate at least one Domain object, wherein the at least one User object is arranged under the at least one Domain object.

5.   (**Original**) The Web Services directory as recited in claim 1, further comprising apparatus adapted to implement the Web Services directory, and in which Directory Services are invoked.

6.   (**Canceled**)

7.   (**Canceled**)

8.   **(Previously Presented)** A Web Services system comprising:

a registry in which businesses may register, the registry comprising a directory module that implements a Universal Description, Discovery, and Integration (UDDI) registry in a Lightweight Directory Access Protocol (LDAP) directory, the directory module configured to:

generate at least one Domain object, wherein the at least one Domain object comprises a directory prefix name, and the at least one Domain object is a root object of the LDAP directory;

generate at least one User object in the LDAP directory based on a UDDI account, wherein the at least one User object identifies a user account for managing at least one Business Entity object arranged under the at least one User object, and the at least one User object is arranged under the at least one Domain object in the LDAP directory, and wherein the at least one User object comprises security information defining what objects a user has access to in the LDAP directory, and wherein the at least one User object grants access to the user based on the security information; the at least one Business Entity object comprising at least one business name and at least one business contact, the at least one business contact comprising at least one business address;

receive a UDDI registry query; and

generate a UDDI response based on data in the at least one Domain object and the at least one User object in the LDAP directory; and

a storage system for storing business information and accessible via the LDAP directory.

9.   **(Previously Presented)** The Web Services system as recited in claim 8, the directory module further configured to:

generate at least one Business Service object, wherein the at least one Business Service object comprises data identifying a technical service, and the at least one Business Service object is arranged under the at least one Business Entity object; and

generate at least one Binding Template object, wherein the at least one Binding Template object comprises data identifying a plurality of service specifications, and the at least one Binding Template object is arranged under the at least one Business Service object.

10.   **(Previously Presented)** The Web Services system as recited in claim 9, the directory module further configured to generate at least one TModel object, wherein the at least one TModel object comprises a keyed reference to the at least one Binding Template object, and the at least one TModel object is arranged under the at least one User object.

Appendix B: Evidence

NONE

Appendix C: Related Proceedings

NONE